

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIETER MAUER,
REINHOLD OPPER and JOACHIM MOSER

Appeal No. 2004-0894
Application No. 09/187,358

ON BRIEF

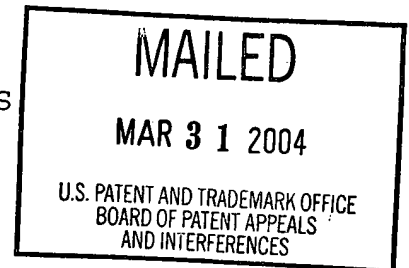
Before OWENS, JEFFREY T. SMITH, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 2, and 7 through 14.

We note that on page 2 of the answer, the examiner has indicated that he has withdrawn the 35 U.S.C. § 102 rejections. In the Reply Brief, appellants note that the rejection of claim 14 under 35 U.S.C. § 103 as being unpatentable over Olvera was not addressed in the answer. On page 3 of the Reply Brief,



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appellants submit that remaining issues are issues 3, 4, and 6 as identified on page 2 of the Reply Brief. The examiner noted the Reply Brief, and therefore, the rejections are as follows.

Claims 1, 2, and 7 through 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Blacket.

Claims 1, 2, 7 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schafer.

Claim 14 stands rejected under 35 U.S.C. § 103 as being unpatentable over Schafer in view of Stich.

The rejection of claim 14 under 35 U.S.C. § 103 over Olvera is deemed withdrawn. Also, as mentioned supra, the two anticipation rejections involving this same reference have been withdrawn. Hence, we do not consider Olvera in this decision.

We note that because the anticipation rejections have been withdrawn, claim 15 is not rejected.

The examiner relies upon the following references as evidence of unpatentability:

| | | |
|--------------------------|-----------|---------------|
| Schafer et al. (Schafer) | 5,192,012 | Mar. 9, 1993 |
| Stich | 5,810,239 | Sep. 22, 1998 |
| Blacket et al. (Blacket) | 5,813,114 | Sep. 29, 1998 |

A copy of claims 1, 2, and 7 through 14 are set forth in the attached appendix.

On page 6 of the brief, appellants state that to the extent that the claims have been separately identified and argued, the claims do not stand or fall together. We will accordingly

consider any claim argued separately. 37 CFR § 1.192(c)(7) and (8) (2003).

OPINION

For the reasons set forth in the answer and below, we affirm each of the rejections.

I. The rejection of claims 1, 2, and 7 through 14 under 35 U.S.C. § 103 as being unpatentable over Blacket

The examiner's position essentially is that figure 8 of Blacket shows appellants' claimed conveyor, except for the use of a lever pivoted by a compression spring. Answer, page 3.

The examiner states that Blacket uses a leaf spring 229 and that it would have been obvious to have substituted Blacket's leaf spring with the art recognized equivalent of a lever pivoted by a compression spring. Appellants do not dispute the examiner's statement that a lever pivoted by a compression spring is an art recognized equivalent of the leaf spring of Blacket.

Appellants argue that their figure 4 illustrates that the catch element 18 and portion 21 are mounted **externally** of the transfer region 15 [emphasis added]. Brief, page 14. Appellants argue that the disclosure at column 5, lines 1 through 6 of Blacket indicates that the upper end of the leaf spring 229 extends into the delivery passage 212, and is moved farther into the delivery passage as the rivet 217 passes from the supply passage into the delivery passage. Appellants state

that Blacket teaches away from their claimed invention wherein the catch element is **external** of the transfer region 15.

On page 4 of the answer, the examiner rebuts and states the Figure 8 of Blacket shows that the transfer region is the area occupied by rivet 217. Appellants have not shown that this area is not the same as the claimed invention. This is especially important in view of the examiner's comments on the claim as follows. On page 4 of the answer, the examiner points out that the claim recites that the catch is external of a "transfer region", and therefore does not specifically define an area for this region. The examiner also states that the claim fails to recite whether the entire catch is external of the transfer region or that it is always located external of the region. Appellants have not specifically resolved these points raised by the examiner.

Blacket's figure 8 shows that the leaf spring 229, at some point in time, is external to the delivery passage 212, wherein the delivery passage 212 may be considered the transfer region. Thus, we agree with the examiner that the claim language is not distinguishable from Blacket in this regard.

On page 16, appellants further argue that in order for the structure of Blacket to function in the intended manner, the upper end of the leaf spring 229 must be located in, and not external of, the delivery passage 212, to retain the rivet at the juncture of the supply passage 220 and the delivery passage 212 upon a loss of the feed pressure. However, Blacket teaches that pins or balls 260A restrain the rivet 217 from being blown out of the delivery passage 212. It is therefore possible that

the pins or balls can catch rivet 217 while the leaf spring is external to delivery passage 212. See column 5, lines 1 through 10 of Blacket. Furthermore, at some point in time, the leaf spring can be external to delivery passage 212.

On page 17 of the brief, appellants argue that the upper exposed end of the leaf spring of Blacket is in the supply passage 220 and in the delivery passage 212 and is not at any time external of the delivery passage. We disagree for the reasons stated above.

Moreover, as pointed out by the examiner, the claim does not indicate whether the catch element 18 is located in its entirety externally of the transfer region.

In view of the above, we affirm the rejection of claim 1 under 35 U.S.C. § 103 as being unpatentable over Blacket.

Beginning on page 18 of the brief, appellants argue dependent claims 2 and 7 through 14. On page 4 of the answer, the examiner states that Blacket teaches all of the specifics of these claims. With specific regard to claims 7 and 8, the examiner states that the recited features are conventional biased lever structures, and appellants do not dispute this statement made by the examiner.

Because appellants' discussion on page 18 does not specifically explain how the examiner's findings are incorrect regarding dependent claims 2, and 7-14, we are not persuaded by appellants' position therein.

In view of the above, we therefore affirm the rejection of claims 1, 2, and 7 through 14 under 35 U.S.C. § 103 as being unpatentable over Blacket.

II. The rejection of claims 1, 2, 7 and 8 under 35 U.S.C. § 103 as being unpatentable over Schafer

Appellants argue that Schafer does not suggest deflection of the end portion of the spring member 8 upon engagement with each advancing nail 10. Brief, page 19.

On page 4 of the answer, the examiner disagrees and states that Schafer shows a leaf spring 8 that extends into the path of the nail heads such that the nails are retained in place while being advanced. Appellants do not explain how deflection of the end portion would not occur when it engages a nail head. We therefore are not persuaded by appellants' arguments.

On page 20 of the brief, appellants argue claims 2, 7 and 8. With regard to claim 2, on page 4 of the answer, the examiner states that Schafer shows that the retaining spring 8 terminates with an angled face which faces the transfer region and prevents the nail from backing into the feed area and that, therefore, this is a locking face. We agree.

With regard to claims 7 and 8, the examiner states that a biased lever, that is, a lever with a pivot axis, is an art-recognized equivalent to a spring leaf, and substituting it for the leaf spring would have been obvious to one of ordinary skill in the art. Answer, page 4. Appellants do not dispute that the two are art-recognized equivalents. We, therefore, agree with the examiner's position in this regard.

In view of the above, we affirm the rejection of claims 1, 2, 7 and 8 under 35 U.S.C. § 103 as being unpatentable over Schafer.

III The rejection of claim 14 under 35 U.S.C. § 103 as
being unpatentable over Schafer in view of Stich

Appellants argue that claim 14 requires that the conveying duct 16 is formed by a split sleeve 31 comprising a first end portion 34 and a second end portion 35, and is enlargeable against the action of a resilient element 36. Brief, page 21. On page 22 of the brief, appellants argue that, in regard to Stich, the feed path of the head of the nail 5 does not pass through a conveying duct which is tapered conically from the upper location, to a second location, remote from the first location. Appellants also argue that there is nothing in common between the structures of Schafer and Stich, and therefore these references are not combinable.

On page 3 of the answer, the examiner states that Stich shows a nail gun with an attachment (6) for resiliently holding the nails adjacent to the transfer region. We find that figure 6A, figure 6B, and figure 6C show a nail being driven into nail hole 31, and as it is being driven through nail hole 31, guide members 13 resiliently respond by opening outwards (see figure 6C). As discussed in column 3, lines 46 through 49 of Stich, attachment (6) includes a holder 12 removably attached to the nose part 3 and a pair of guide members 13 open/closably mounted on the end of the holder 12 which guide driven-out nails. Hence, we disagree with appellants' position on this issue.

With regard to the combinability of the Schafer and Stich references, as pointed out on page 5 of the answer, both Schafer and Stich are directed to nail guns, and are therefore

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each within the field of the inventor's endeavor. We, therefore, are unconvinced by appellants' arguments in this regard.

In view of the above, we affirm the rejection of claim 14 under 35 U.S.C. § 103 as being unpatentable over Schafer in view of Stich.

III. Conclusion


We affirm each of the rejections.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Terry J. Owens
TERRY J. OWENS
Administrative Patent Judge


JEFFREY T. SMITH
Administrative Patent Judge

BOARD OF PATENT
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BEVERLY A. PAWLIKOWSKI
Administrative Patent Judge

BAP:psb

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APPENDIX

1. A conveyor for elongate components (12) designed with a head (41) and a shank (42), with a feed arrangement (7), for feeding the components in a prescribed direction, comprising a transfer arrangement (8) with a transfer region (15) into which the elongate components (12) are fed from a feed duct (11) comprising a head guiding duct (13) having a feed path for the heads (41), and a shank guiding duct (14) with the ducts (13) and (14) being in communication with a conveying duct (16) into which the components (12) can be moved from the transfer region (15), characterized by the transfer arrangement (8) which comprises:

at least one catch element (18) being located externally of the transfer region (15) and extending along, and adjacent, the head guiding duct (13) generally in the prescribed direction of the feeding of the elongate components (12);

at least one portion (21) of the at least one catch element (18) being removably extendable into and out of the feed path of the head guiding duct (13);

a biasing element (39) positioned to normally urge the at least one portion (21) of the at least one catch element (18) movably into the feed path of the head guiding duct (13) for engagement with the elongate components (12) being fed there-through; and

the at least one catch element (18) and the at least one portion (21) thereof being mounted for deflected movement out of

the feed path of the head guiding duct (13) against the normal urging of the biasing element (39) upon engagement with each of the elongate components (12) being fed through the feed path of the head guiding duct (13) to allow continued feeding of the elongate components (12) through the feed path.

2. The conveyor according to claim 1, characterized in that the at least one catch element (18) has a locking face (22) facing at least partially the transfer region (15) to prevent any elongate component (12), which has passed into the transfer region (15), from slipping therefrom.

7. The conveyor according to claim 1, characterized in that the at least one catch element (18) is movable pivotally around an axis (38) and the biasing element (39) acts on, and allows movement of, the at least one catch element from the feed path upon engagement with the elongate components (12) passing through the feed path.

8. The conveyor according to claim 7, characterized in that the biasing element (39) is a compression spring, the at least one catch element (18) is formed with the at least one portion (21), which is a first end, and a second end (48), and the axis (38) is located at an intermediate portion of the at least one catch element between the first end and the second end thereof, and the compression spring is arranged to engage the at

least one catch element (18) between the axis (38) and the first end of the at least one catch element.

9. The conveyor according to claim 1, characterized in that the transfer arrangement (8) comprises two relatively displaceable positioning segments (9, 10), the positioning segments (9, 10) defining a recess (24) through which a component (12) can be introduced into the conveying duct (16).

10. The conveyor according to claim 9, characterized in that the transfer arrangement (8) further comprises biasing elements (27, 28) for urging respectively the positioning segments (9, 10) together and allowing displacement thereof against the urging of the biasing elements (27, 28).

11. The conveyor according to claim 9, characterized in that each positioning segment (9, 10) is pivotal round a respective pivot axis (25, 26).

12. The conveyor according to claim 9, characterized in that the positioning segments (9, 10) have a form substantially corresponding to the cross section of the feed duct (11).

13. The conveyor according to claim 9, characterized in that the positioning segments (9, 10) are structured to form a continuation of the feed duct (11) between at least the feed duct (11) and the transfer region (15).

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14. The conveyor according to claims 1 or 9, characterized in that the conveying duct (16) is formed by a split sleeve (31) which comprises a first end portion (34) adjacent the transfer region (15) and a second end portion (35) remote from the transfer region (15) and at least one resilient element (36) is arranged on the second end portion (35), the cross section of the conveying duct (16) tapering conically substantially from the first end portion (34) to the second end portion (35) and being enlargeable against the action of the element (36).